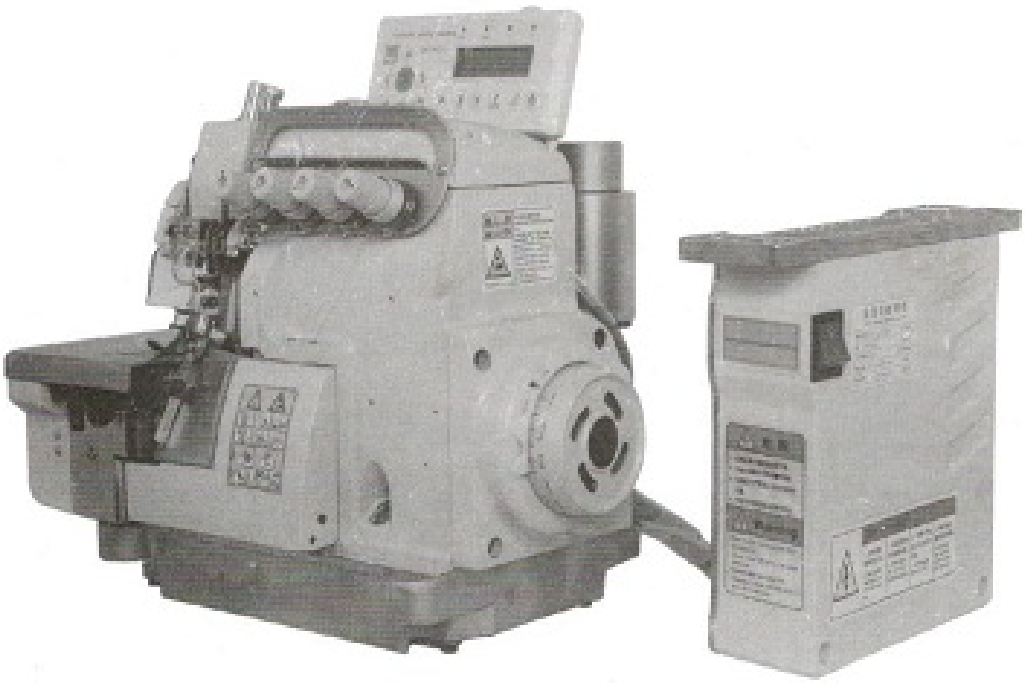
Automatic sewing machine

User Manual



Please read the manual carefully before using this unit.
Please keep this manual handy for ready reference.

Foreword

Welcome to use our products, it is the right investment choices in garment industry!

本说明书为本公司新研发的“吸风剪线”产品做对照参考手册，请认真阅读此手册以更好的运用本公司产品！

The User manual is for our newly developed "Auto-Trimmer servo Motor with suck system " products Reference Manual. Please read this manual carefully, hope it can give you useful help.

阅读本说明前以下要求说明请注意：

Before reading the manual, Please note the following requirements:

1：用户使用作业前必须可靠接地，保证人身安全！

The user must be grounded before operations to ensure safety

2：非专业人士请勿拆卸控制箱和电机

Non-professionals do not disassemble the control box

3：控制箱与电机远离强磁高辐射环境

The control box and motor away from the magnetic high radiation environment

4：不要在过热环境中作业

Do not work in hot environments

5：不要在过于潮湿环境中作业

Do not work in humid environments too

6：用户保证供电电压的稳定（210V-240V）

Users to ensure stable supply voltage (210V - 240V)

安全叮嘱：

Safety requirement

1：电机接通时请不要把脚放在脚踏板上

Do not put your feet on the pedals when the motor is switched on

2：本产品请专业人士安装调试

Let professionals to install and debug this product

3：严禁在通电时打开控制箱与电机端盖

Do not open the control box and the motor cover when energized

4：换针，穿线或更换底线时请关闭电源

Please turn off the power when changing the needle, threading or replacing the bottom line

5：安装，拆卸维修时请关闭电源

During installation and removal service, please turn off the power

6：翻抬缝纫机时请关闭电源

Please turn off the power when turn lift sewing machine

保修策略：

Warranty Policy

1：本产品自购买起免费保修2年，终身维护。保修期内除人为损坏外出现任何质量问题可免费修理

Since from the purchase of this product, the free 2-year warranty, Lifetime Maintenance. during the warranty period ,Any quality problems the product will be free repaired, Except artificial damage.

2：未经本公司同意自行拆卸，改装造成损坏将不给于保修.

without our consent disassemble or modify, the damaged will not give in warranty

3：但凡出现无法解决的问题可以联系本公司

Whenever find the problem can not be solved, you can contact the company

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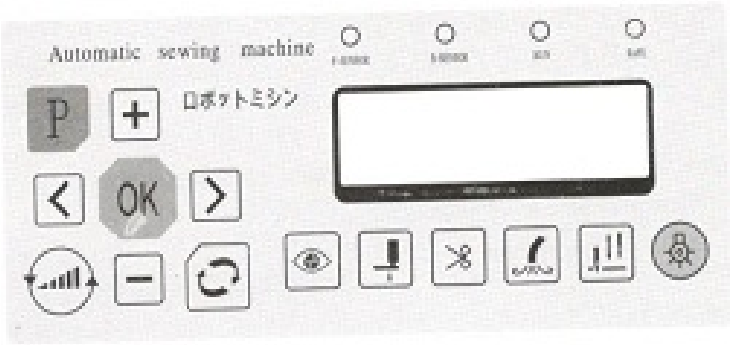
1： Introduction of display screen common Operation



序号 No.1	按键图标 Button Icons	功能说明 Function Description	
P1		点动 ：自动→半自动→全手工，之间切换。 Jog : Auto → Semiauto → Full manual，Switching between	
P2		点动 时进入光眼调整，重复点动切换：光眼开启与关闭，按OK键确认 Jog Into the light eye ON or OFF, Touch"OK"button to confirm	长按 进入光眼参数调整（需密码） Long press Enter the light eye Parameter adjustment (password required)
P3		点动 时进入剪刀调整，重复点动切换：前剪，后剪，前后剪，关闭，按OK键确认 Jog into scissors adjustment, Repeat jog switch them: Front cutting, back cutting, Front and back together cutting, Stop Cutting Touch"OK"button to confirm	长按 进入剪刀参数调整（需密码） Long press Enter scissors parameter adjustment (password required)
P4		点动 时进入吸风调整，重复点动切换：前吸，后吸，前后吸，关闭，按OK键确认 Jog into suck adjustment, Repeat jog switch them: Front sucking, back sucking, Front and back together sucking , Stop sucking Touch"OK"button to confirm	长按 进入吸风参数调整(需密码) Long press Enter sucking parameter adjustment (password required)
P6		点动 时进入压脚调整，重复点动切换：前抬，后抬，前后抬，关闭，按OK键确认 Jog into Auto-lift foot adjustment, Repeat jog switch them: Front lift foot, back lift foot, Front and back together lift foot, Stop lift foot Touch"OK"button to confirm	长按 进入压脚参数调整(需密码) Long press Enter Auto-lift foot parameter adjustment (password required)

P8		点动 切换上下停针位按“OK”键确认 Jog switch up or down needle position Touch"OK"button to confirm	长按 进入针位参数调整(需密码) Long press Enter needle position parameter adjustment (password required)
P12		点动 进入转速调整，再通过 键调整所需要的转速，转速自动保存。 Jog into run speed adjustment, Through change the speed, automatically saved	长按 进入转速锁定（需要密码） Long press Enter speed parameter lock (password required)
P13		机头LED灯开关键 ON OFF SWITH OF Head LED lights	
常用按键 Common keys			
1		短按进入用户参数 Jog into user parameters	长按进入系统参数（需要密码） Long press enter System parameters (password required)
2		参数确定键 Parameter confirm key	
3		“+”键（修改数据时加） Up key (when need add data)	
4		“–”键（修改数据时减） Down key (when need reduce data)	
5		向左键（在进入参数项时参数号减） To the left (enter the parameter, reduce)	
6		向右键（在进入参数项时参数号加） To the right (enter the parameter, add)	
7	状态指示灯 Status Indicator	黄色：前光眼信号指示。 Yellow: front light eye signal indication.	《有布遮住时亮起》 lights up with cloth cover
		紫色：后光眼信号指示。 Purple: back light eye signal indication.	《有布遮住时亮起》 lights up with cloth cover
		绿色：起缝状态指示。 Green: Begin sewing status indication.	《电机运转时亮起》 lights up when motor running
		红色：安全开关指示。 Red: safety switch indicator	《断开时闪烁。正常合闭时灭》 Flashes when disconnected, light off when normal close
		蓝色：显示屏电源指示。 Blue: display power indicator.	《显示屏通电亮起》 lights up when display has power

2：如何进入参数与如何修改参数

How to enter parameters and how to modify the parameters

系统参数进入解析：

长按（ P ）键持续3秒将进入“系统参数”列表（需要密码进入调整）。（ < ）（ > ）键将选取修改的是参数值还是菜单值，点动后选取的地方将会出现闪烁。（ + ）（ − ）键将增加或减少闪烁区的数值。

修改完毕参数后需要按（ OK ）键保存参数并退出系统参数。

注：以上是进入方法，具体参数号代表的参数意思详情如下：

System parameters entering analysis:

Long press (P) button for 3 seconds to enter the "System Parameters" list (requires a password to enter the adjustment). (<) (>) Key for select to modify a parameter value or menu value, After choice, the selected places will be flashing. (+) (−) Key to increase or decrease the value of flashing place.

After completion of parameter changes need to press the (OK) key to save the parameters and exit the system parameters.

Note: the up entry method, specific parameters No. on behalf of the parameters meaning as follows::

3：操作参数说明表
Operating Parameter Description Table

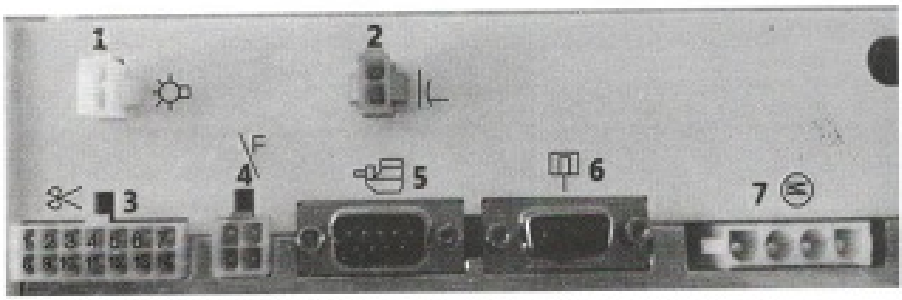
系统参数列表：

菜单号 System parameter list	功能说明 Function Description	功能参数默认值 Function parameter default values	功能参数范围 Function parameter ranges	参数说明 Parameter Description
S2	两传感器间针数 Number of stitches between the two sensor	20	1~50	设定两个光眼之间的针数 Set the Number of stitches between the two photoeye
S3	前剪线延时针数 Former cutting line Delay Number of stitches	4	0~50	后面光眼感应到后延迟剪线的针数 Back photo eye Sensor to
S4	后剪线延迟针数 Stitches number for auto trimmer	12	0~50	后面光眼离开后延迟剪线的针数 After leaving latter photoeye, how many Delay stitches begin to auto trimmer
S5	前吸气开启针数 Stitches number beginning to suck	10	1~50	感应到第一个光眼后从第几针开始吸气 From which stitches beginning to suck after leaving former photoeye
S6	前吸气关闭针数 Stitches number to off former suction	8	1~50	打开后计数几针后关闭吸气 Account how many stitches begin to close former suction
S7	后吸气开启针数 Stitches number to open latter suction	10	1~50	离开后光眼后第几针开始吸气 After leaving latter photoeye, how many stitches begin suck
S8	后吸气关闭时间 Off time latter suction	200	100~5000MS	离开光眼后，计数几毫秒后关闭吸气 After leaving the photo eyes, count how many milliseconds off suction
S12	停车延时针数 delay stitches after parking	10	1~99	剪完线后多少针自动停车 How much stitches auto parking after trimmer
S16	前光眼响应时间 Former photoeye response time	60	1~100MS	前面光眼感应到后响应的时间 the response time when former photoeye has sense
S17	前光眼灵敏度 former photoeye sensitivity	20	12~100	为适应不同布料设定前光眼的透布强度 setting photoeye through the fabric strength, To adapt to different fabrics

S18	后光眼灵敏度 latter photoeye sensitivity	20	12~100	为适应不同布料设定后光眼的透布强度 setting photoeye through the fabric strength, To adapt to different fabrics
S19	前抬压脚保留时间 retention time for former presser foot	100	100~2000	抬压脚抬起后持续的时间 duration after lift foot
S20	后抬压脚启动时间 latter presser foot start time	0	0~2000MS	脚踏板后踏压脚响应的时间 The lift foot response time after latter foot pedal
S21	抬压脚保护时间 Presser foot protection time	3	1~120S	手动抬压脚持续多少时间后关闭 how much time sustained after Manually lift presser foot
S22	放抬压脚延时时间 Delay times down presser foot	20	20~800MS	放压脚时间 The times down presser foot
S23	连续送布吸气剪线 Continuous feed suction cut line	0	0~1	
S24	运转中手动开关动作 In running manual switch action	1	0~1	0：电机运转时按手动剪线不剪。1：可以剪 0: When the motor is running, tuch manual swjtch no cutting. 1: Have cutting
S25	安全开关选择 Safety switch selection	1	0~1	1：开始安全开关 1: Start the safety switch 0：关闭安全开关 0: off safety switch
S26	切刀保留时间 Cutter retention time	35	1~1000MS	切刀动作时间 Cutter action time
S27	界面回复时间 recovery time	5	5~100S	控制面板在进入菜单后多少时间跳回主界面 After entering the control panel, how much time to jump back to the main menu interface
S28	光眼数量选择 Select photoeye Quantity		1~2	1单光眼2双光眼 1 single photoeye, 2 double photoeye
S29	前光眼极性选择 Former photo eyes polarity selection		0~1	
S30	后光眼极性选择 latter photo eyes polarity selection		0~1	
S39	参数复位 Parameter reset	0	0~1	调到1长按OK键有效 Transferred to 1 long-press the OK button to effective

4：控制箱端口说明

The control box Port Description



端口号码 Port Number	端口连接的器件名称 Port device name for the connection
1	W500缝纫机LED机头灯插孔，吸风剪线配套时端口无效 Interlock W500 head LED socket, the port is invalid when machine add suck and trimmer device
2	抬压脚控制端口，连接压脚电磁铁或电磁阀（30V） Presser foot control port, connect the presser foot solenoid or solenoid valve (30V)
3	14P多功能端口 14P multifunction port
4	脚踏板端口，连接调速器 Foot pedals port , connection governor
5	连接吸风剪线显示控制面板connecting the control panel display of suction and trimmer
6	连接电机相位信号线 Connect the motor phase signal line
7	连接电机4线驱动线 Connection motor No.4 drive line

3号14P多功能端口

No.3 14p multifunction port

3号多功能端口标号 The 3rd multifunction port label	功　　能 Function
1，8，11	1：GND 8：信号Signal 1 11:5V
2，9，12	2：GND 9：信号Signal 2 12:5V
3，10	3：压脚输出Presser foot output 10:30V
4，2	4：保护信号输入Protection signal input 2：GND
5	5：大地线 Ground
6，13	6：吸气输出 Suction output　13:30V
7，14	7：剪刀输出 Scissors output　14:30V

5：错误代码解析
Error code analysis

显示的错误码 Display error code	错误码意思 Error code meaning	错误产生的多种可能 Various possible for the erro
ER-01	找不到停针位 Can't find the needle position	1.手轮靠的不够近间隙在2mm内。 2.九针插头接触不良 3.电机霍儿坏,要更换电机. 4.手轮上的磁铁掉落. 1.The handwheel is not close, clearance within 2 mm。 2. Nine plug contact undesirable 3. Motor HuoEr bad, to replace the motor, 4. The handwheel magnet in the loss。
ER-02	开机没有检测到调速器 Not detected boot speed regulator	1.调速器插头没有插, 2.调速器线断了 1.Speed control device without plug, 2. Speed wire is broken
ER-03	电机霍儿或相位线错误 Motor HuoEr or phase error	1.九针插头接触不良, 2.电机没有按装好 3.霍儿坏 1. Nine hole plug contact undesirable, 2. The motor doesn't pack good, 3. HuoEr bad
ER-04	堵转保护 Locked-rotor protection	1.电机过载, 2.电机与电控相连接的四心线接触不好. 1. The motor overload, 2. The motor and the controller connected four hole line contact is not good
ER-05	硬件过流保护； Hardware over-current protection;	1.电机过载, 2.信号线接触不好或断了。 1. Motor overload, 2. Line contact is bad or broken,
ER-07	串口通信超时错误 Serial port communication timeout error	显示屏至主板信号线不良或主板坏, Display to the system board signal bad or bad,
ER-09	存储器不良 Memory problem	1:主板存储器损坏或不良 Motherboard memory damage or adverse
ER-10	光眼控制线路故障 photo eye control line failure	1:显示屏链接光眼线路不良 adverse connection from display to photo eye

6：装箱单

Packing List

名 称 Name	数 量 Quantity
电机 Motor	1
转子 Rotor	1
电控箱 Electric control box	1
风叶 Fan blade	1
脚踏板 Foot pedals	1
控制显示面板 Control Display Panel	1
拉杆 Drawbars	1
剪刀光眼集成开关 Scissors photoeye integrated switch1	
1：气动（电磁阀，气缸）或 Pneumatic (solenoid valve, cylinder) or 2：电动（抬压脚电磁铁，剪刀电磁铁） Electric (presser foot electromagnet scissors electromagnet)	说明：这里视客户选的套件定！客户买回后包装盒里是相应的套件1套 Note: the package set depends on customer selected, Choose one in the two sets.
吸风装置 Suction device	1
光眼套件（前光眼&后光眼） photo eye kit (former & latter photo eyes)	1
螺丝包 Screw packet	1
定位护套 Positioning sheathing	1
说明书 User manual	1
合格证 Certification	1